

Amendments to the Claims:

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A CD28 peptide mimetic for blocking deleterious T cell mediated immune reaction,

said peptide mimetic being ~~from 15 to 30~~ 20 to 25 amino acids in length,

said peptide mimetic comprising ~~levoratory~~ levorotary or ~~dexorotary~~ dextrorotary amino acids,

~~said peptide mimetic comprising a core motif dispersed between two flanking sequences, each of said flanking sequences comprising a plurality of amino acids;~~

wherein the peptide mimetic comprises the sequence set forth in SEQ. ID NO: 5 ~~sequence of the core motif is MYPPPY, SEQ ID NO. 1,~~ when the peptide mimetic comprises ~~levoratory~~ levorotary amino acids; and

wherein the peptide mimetic comprises the sequence set forth in SEQ ID NO: 6 ~~sequence of the core motif is YPPPYM, SEQ ID NO. 2,~~ when the peptide mimetic comprises ~~dexorotary~~ dextrorotary amino acids; and

~~wherein the peptide mimetic assumes a polyproline conformation when placed in water at physiological pH and a temperature of about 25° C.~~

2. (cancel)

3. (original) The peptide mimetic of claim 1 wherein the amino and carboxyl ends of the peptide are end blocked.

4. (currently amended) The peptide mimetic of claim 1, wherein the binding affinity of the peptide mimetic binds to for the B71 ligand protein with an affinity that is from 10 fold greater to 2 fold less than the binding affinity of CD 28 for the B71 protein.

5. (currently amended) The peptide mimetic of claim 1, wherein the binding affinity of the peptide mimetic for the B71 ~~ligand~~ protein is less than the binding affinity of CTLA-4 for the B71 protein ligand.

6. (currently amended) The peptide mimetic of claim 1, wherein the ~~K_d~~ K_d of the mimetic with respect to B71 is from 2 to 3 micromoles.

7-9 (canceled)

10. (currently amended) ~~The peptide mimetic of claim 1~~ A CD28 peptide mimetic for blocking deleterious T cell mediated immune reaction, wherein said peptide mimetic is 20 or 21 amino acids in length and comprises levorotary or dextrorotary amino acids, and wherein the peptide mimetic comprises the sequence set forth in SEQ ID NO: 5 when the peptide mimetic comprises levorotary amino acids or the amino acid sequence set forth in SEQ ID NO: 6 when the peptide mimetic comprises dextrorotary amino acids.

11-12 (canceled)

13. (currently amended) The peptide mimetic of claim 4 10, wherein said peptide mimetic is 20 amino acids in length, and wherein the sequence of said peptide mimetic is SEQ ID NO: 5 or SEQ ID NO: 6 ~~a biologically active variant of a peptide mimetic which comprises one of the following reference sequences: SEQ ID NO. 5, SEQ ID NO. 6, SEQ ID NO. 7, SEQ ID NO. 8, SEQ ID NO. 9 or SEQ ID NO. 10; and~~

~~wherein the sequences which flank the core motif of the variant are at least 70% identical with the sequences which flank the core motif in one of said reference sequences.~~

14-16 (cancel)

17. (withdrawn) A method of treating a subject with a T cell mediated disorder or autoimmune disease comprising: administering a biologically effective amount of one or more CD 28 peptide mimetics of claim 1 to said subject.

18. (withdrawn and currently amended) The method of claim 17, wherein the subject has multiple sclerosis, ~~rheumatoid arthritis, insulin-dependent diabetes mellitus, or has received or is about to receive an allograft transplant.~~

19. (cancel).

20. (withdrawn and currently amended) The method of claim 17, wherein the amino and carboxyl ends of the peptide one or more peptide mimetics are end blocked.

21-25 (canceled)

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26. (withdrawn and currently amended) The method of claim 17, wherein said peptide mimetic is 20 amino acids in length and has the sequence set forth in SEQ ID NO: 5 or SEQ ID NO: 6 ~~comprises SEQ ID NO: 5 or SEQ ID NO: 6.~~

27. (withdrawn and currently amended) The method of claim 17, wherein said peptide mimetic is 20 amino acids in length and has the sequence set forth in SEQ ID NO: 5 or SEQ ID NO: 6 ~~comprises SEQ ID NO: 7 or SEQ ID NO: 8, and wherein the subject has multiple sclerosis.~~

28-32 (canceled)